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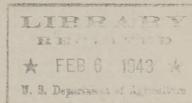
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# BULBS FOR SPRING PLANTING

a catalog of





The Amaryllis, Iris, Lily, Arum, Orchid, Billbergias and Other Families.

Articles: "Praise The Lord and Pass The Ammunition," a personal letter. How to Grow Amaryllis; Complete Culture Directions for All Listings.

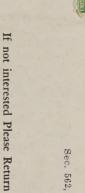
SPRING 1943

### **CECIL HOUDYSHEL**

1412 Third St.

La Verne, California

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#### PRAISE THE LORD AND PASS THE AMMUNITION!

Dear Floral Friends:

This letter is a personal message to you, individually.

The catalog was written with the purpose that every copy would go to a friend; a friend, because a flower lover.

When friend meet, the uppermost topic is the war. Hating war and loving peace as Americans do, we are, nevertheless, now absorbed by the necessity to fight for our

national and even personal existence and for the peace and the liberty of all nations and races.

When I wrote last, five months ago we were still losing territory but gaining momentum in the

home front of production.

Now we can be sure that the tides of the battles on all foreign fronts have turned in our favor. But we must also realize that we shall probably suffer some defeats and temporary setbacks for our armies. We must not be too sanguine and relax our efforts. The battle fronts surge back and forth with the summer favorable to the Axis and the winter to the United Nations. Germany fights like an old-time football team. We can expect another "flying wedge" in late spring. They are producing for that effort now.

There are also battles and sometimes losses on the home front of production. There are those who are unwilling to forget personal gain and seize the opportunity to make contracts with the government at high profits. Likewise there are other groups who strike for higher wages instead of using the fair means offered by law to adjust inequalities of wages. Every strike means the loss of American lives on the battle front. We are not yet, all of us, "all out for victory."

Many have been the inspiring words and deeds by those who fight for our freedom on battle fronts.



THE HERBERT MEDAL

Words and deeds like "Sighted sub, sank same," or the words, accompanied by action, of Chaplain Forgy at Pearl Harbor. Divine services being interrupted by the attack, he sprang to an anti-aircraft gun and began firing. To a question he replied, "Praise the Lord, and pass the ammunition. I just got one of the so-and-so's." Chaplain Forgy thereby enrolled his name among America's Immortals.

Compare with such deeds, the acts of capitalists who build fortunes at the expense of Liberty's dire need. Or with the acts of a war worker who is slack in his efforts,

takes frequent vacations or goes on strike.

Compare the many acts of heroism with those of us at home who are unwilling to conserve rubber by traveling less; or to have less coffee, less meat, less butter in order that those who fight may be strong and perfectly nourished.

My words can have little effect on our great struggle. But I will be happy if I can give even a little encouragement to those of you who feel as I do, that we are each of us a soldier for Democracy and Freedom; yes, even a soldier of the Lord because if the Anti-Christ does not exist in the persons of Hitler, Mussolini and Hirohito it never could exist.

Mussolini! Inventor of Fascism and initiator of the Program of Conquest followed by Germany and Japan! Conqueror of Ethiopia! His words, "we have buried the putrid

corpse of Liberty!" He tried, unsuccessfully, to lead the people away from the Church of their Fathers. Anti-Christ. He stinks to high Heaven.

Hitler, who would be the God of Germany! Erratic, Erotic, Pervert, Libertine, Arch-Enemy of Mankind, Egoist, Egotist, Paranoiac, Enslaver and Despoiler of conquered

nations. Liar, behind a cloak of self-righteousness. Fool, that became a maniac.

Hirohito, puppet of a dastardly regime that copies the worst of Mussolini and Hitler. The puppet of Judas minds trained in American Universities; to whom we gave every advantage of training in our arts, our sciences and our efficiency and skill in manufacturing. Their best customer in commerce and their most dependable and liberal source of supplies they did not produce. A puppet ruler whose lying and fawning emissaries could scarcely hope for a success not based on a sneak attack.

These are the three who would divide the world between them and dominate it, do away with Freedom and Democracy. They will do it too, if we are not a united people. Let us resolve to be that. Capital must serve and so must labor. If they do not do it willingly, they will find themselves in a much worse situation and will be doing it anyway. The force that will accomplish this will be the will of the American people and

not the will of any Dictator.

From this war there will emerge a better and freer world, a better and freer America. Liberty and Progress go hand-in-hand. Progress is continual but not always steady. One of our most difficult problems has been the relation of Labor and Capital. This has led to class consciousness and class hatred, where there should now be only one class—Americans all.

As a result of this struggle, many Americans believe that the meaning of the term, "The Capitalistic System," refers to Capital crushing Labor. Demagogues have so represented it. And it means nothing of the sort. It means that system in which property rights and business enterprise are vested in the individuals and not in the state as in State Socialism and Communism. It means that you and I may choose our profession, our trade, our business activity and not the state. It means that we can enjoy the fruits of our industry, save for and build a home or a business and own it. It is ours, not the state's. In other words it is the American way and the English way, the way of Freedom and Democracy.

It was not surprising that some elements took unfair advantage of their opportunities. Capital, before law restricted it, imposed unjust working conditions and unfair

wages upon Labor. Therefore Labor wisely unionized.

Now in this contest between Labor and Capital, I am a bystander and often one of the innocent victims. I am not prejudiced against either side and I am strong for both—if they behave.

Since all I own in this world is one of the rarest collections of bulbs, the tools and sufficient "capital" to take care of them, I am not a "capitalist" in the opprobious sense although in the true significance of the term I believe in the Capitalistic System.

Therefore I have no personal prejudice. I am only the rabbit, caught between two boulders. Many of you, especially the farmers and small business people are likewise "rabbits." I know by personal contact that many of those who labor, probably a majority, do not approve of extremes. They want only justice and a moderation that allows justice to all, and freedom. Most of us believe in all the freedoms, not the part of them that favors ourselves. Thus the right of an individual worker to belong to the union he chooses, or not to belong to any, is his right under Liberty and is equal to his right to work. The "Open Shop" policy, gives him this right.

When Capital began to impose on Labor they overlooked an important point—the fact that Labor holds the power of the ballot. As a result, Capitalists to hold their power began to depend on politics; the politics of bribery, scheming underhand manipulations that could only succeed temporarily. Only one policy can succeed indefinitely. That policy must include the rights of all the people.

If Labor takes advantage of this lesson which they have themselves taught to Capital

and yield to Capital and to all of us "Rabbits" our own rights, they will do well. If

they do not, they too will suffer the inevitable result.

Power is an intoxicant, that first slows down inhibitions and finally overcomes them. It becomes like a disease, like a fever and produces its own anti-toxin that will destroy it. This has been the result thruout time. Rome fell because it became a glutton for power. Power enabled its citizens to become weak through soft living. No human power has ever continued long unless based on Justice to all. Mussolini, Hitler and Hirohito are victims of a lust for power. History teaches that they cannot succeed long.

History also teaches that special interests within a nation cannot grasp and hold indefinitely the balance of power. Capital could not. Their weakness was the lack of voting power. There is the strong Factor in Democracy, The Ballot. Let those who

seek undue advantages for any group beware of the ballot.

This war will end. Possibly sooner than we think. The soldiers of Freedom and Democracy will return. We better be sure that they return to a land that gives them all the freedoms. There are many millions of them who have fought, suffered deprivations, have seen their comrades die and have themselves endured every risk—for \$50 per month. They will not be prejudiced in favor of those who stayed at home and worked for \$50 to \$125 per week, and at the same time interrupted production by strikes or by vacations.

These millions of returned soldiers will have many more millions of close relatives and friends who will be sympathetic to their rights. They will hold the Power of the Ballot. The "Rabbits" will be on the side of Justice.

This power which they will hold will be no threat to an Organized Labor that regards the rights of all people. It appears that the really wise and patriotic Labor leaders recognize this and strive to guide their followers to a reasonable course. But they do not always succeed and not all the lesser leaders are wise. I believe thoroughly in organized labor and sincerely hope that it adopts an effective form of self discipline and a recognition of the rights of "Rabbits."

There is no doubt that there is a social revolution in progress in America and out of it we expect a better America to emerge. If every element recognizes the rights of all the other elements it will be a peaceful, progressive movement toward the Right. But there is no doubt about the fact that we do have Leftists even in Government service. Many of these are intellectually brilliant but they are nevertheless subversive to the American ideas of individual freedom. Americans must use the ballot as their safeguard. We must not allow communism to spread. The Communists are extremely clever in finding methods of propaganda.

Here is one way in which they might be able to succeed. At the close of the war, it will take a year or more to return all our millions of soldiers. Many of these are youths. Many have had their education in America interrupted. Very likely they will have some educational means provided, possibly lectures, trade schools or even colleges. Let us see to it that no Prof. Bugwells are sent to instruct them.

Let us likewise provide during the absence of our heroic youth that the America to which they are to return will not have become decadent in its moral, spiritual and cultural nature. My particular concern is our flower gardens. Much of our Victory Garden propaganda concerns the production of food for the bodies and says little about flowers as food for the soul.

England bore the brunt of German bombings and even though hungry for onions they continued to grow flowers. They even held flower shows and Mrs. Miniver describes one that continued uninterrupted in spite of an air raid. Do we admire the courage, the resistance, the morale of the English? If we do, we may well follow their example. But I must admit that the English care more for flowers than Americans do. An English countryside will show more flowers than an American. Indeed, I must confess that Americans fall short in their appreciation for the beautiful and this is exhibited

by the fact that American homes are not universally surrounded by a profusion of flowers.

Very many have no flowers.

I wish every American could make a journey through the mid-west towns and country, noting the flowers. Then visit the Mexican colonies in California towns. Note the flower gardens surrounding the home, often only a shack, of every laborer. I will extend the wish that you might visit Mexico itself down to Mexico City. When you return answer this question: Who loves beauty most, Mexicans or Americans?

Let us make America beautiful and gay with flowers to greet returning American

soldiers. Do you want them to return to only cabbages and carrots?

Will you who love flowers join me in a campaign of promoting flowers? I believe the following plan will be effective. It might even initiate a stronger sentiment for flowers in America. Let each one encourage neighbors and friends to plant and care for more flowers; associate with garden clubs and influence the members to grow more flowers along with the vegetables; talk in meetings and clubs for flowers; write articles

for newspapers.

My first 50 years of life were given to the profession of Education. Half of this, of course, was necessary preparation. This profession appealed to me as a means of service. For a similar reason, long ago I chose for the next 50 years the service of growing and promoting flowers. Therefore, do not interpret the next suggestion as a wholly selfish one. You can help me to grow more flowers and to give more promotion to this high art by telling your friends about our bulbs. Show my catalog and suggest that they drop us a card and ask for one.

But do not send us long lists of friends who ought to buy bulbs (but may not). We

place names on our mailing list only when the person requests it, himself.

Last of all, the most effective propaganda for good is a good example. The best way to teach righteousness is to live right; to teach truthfulness and morality is to be truthful and moral; to teach industry, sobriety and culture is to exemplify them and if you want America to be a land of beautiful gardens, grow more flowers yourself.

And don't forget to buy more War Bonds and Stamps.

CECIL HOUDYSHEL

### TERMS AND INSTRUCTIONS FOR ORDERING

Read the following carefully. It will avoid delay or misunderstanding.

Sales Tax. California customers must add 3% for state sales tax.

Order Early. Late planting results in less satisfaction with most bulbs.

Remit with order, by check or M. O. Currency or coins are acceptable but we are

not responsible if lost. Stamps reluctantly accepted at 8% discount.

**C.O.D.** Orders require more bookkeeping and other labor to fill. There is a postal fee to mail, another to return your money, thus you pay 25c or more extra. If possible, please cooperate and remit with order. The extra labor on C.O.D. orders is most difficult under present conditions.

Postage prepaid on orders of \$1.00 or over. Under \$1.00, add 10c for postage and

wrapping. Insurance 5c extra.

Prices given are for one bulb unless otherwise stated. A dozen costs ten times the price of one. Six bulbs are sold at the dozen rate. If not otherwise priced, 100 bulbs are sold for the price of 7 doz., or 70 times the cost of one. Not less than 100 are sold at 100 rate. 50 are sold for the price of 4 doz.

Wholesale. Dealers send for our Wholesale Bulletin. Use your business stationery

or otherwise identify yourself as a bonafide dealer.

Garden Clubs, who pool their orders for collective buying in quantity, send for our Garden Club Bulletin. We give you wholesale prices and discounts on a "transportation prepaid" basis. This Garden Club Bulletin is available only to the official Purchasing Agent of actually organized Garden Clubs but not to individuals, even though Garden Club members.

Foreign Orders. Postage is prepaid if no greater than to our 8th zone. Best to remit

a little extra. If too much, we send extra bulbs.

Errors. Our packers make a few, not many. We want to correct them. Notify us at once, in case of shortage or error. Unpack your order as soon as received. Don't wait two weeks, then tell us the bulbs were mouldy.

Substitution. If out of a variety, we usually substitute one as near like it as possible, as good or better and of equal or greater value. If you do not approve this, say, "no

substitution.'

Guarantee. Our bulbs are true to name, and healthy. We do not, however, accept any responsibility for their performance since we cannot control the conditions of their growth. If, in your opinion, our bulbs are not up to our specifications, please notify us at once when you receive them. But do not return them until we explain. One of our customers last year returned Dwarf Callas because they were small.

Culture directions are not sent with bulbs as all necessary information is given in

this catalog.

Catalogs. Spring Catalog is mailed Jan. 15. Fall Catalog Aug. 15. Iris Price List, sent on request only, at any time. If no orders are received for two years, names are

dropped from our mailing list.

Correspondence. One of the most pleasing features of our business is the many friendly letters we receive; letters reporting results in bulb culture. Often a customer discovers a useful factor that is new to us, and it should be passed on to others. I would like to reply individually to each letter, but it is impossible. If information is needed read this catalog first. It is probably here. If not, we want to help you. Make the reply easy. Then enclose a self addressed post card and I can pen the answer. Under present conditions we are unable to get enough typists. Try to understand this and to help.

Identifying Bulbs. We can usually identify your unknown bulbs. The service is gratis. Sometime we can do this from the flowers and foliage tho it is better to include a bulb and to give the case history and all known facts. In some cases we must grow a bulb a year to determine it. Then we inform you. We cannot undertake to identify hor-

ticultural varieties of Iris, Gladiolus, etc.

Time of Delivery. We acknowledge your orders and ship at once if it is the correct time to move the bulbs. But some bulbs can be moved only within a short dormant period, not always a calendar date. It is better to order early and let us deliver at the correct time. If you do not receive your order promptly, or an acknowledgment, be sure to notify us. We guarantee safe delivery.

#### GENERAL CULTURE DIRECTIONS

The best bulb soil is a rich sandy loam. Only a few, like Bearded Iris, prefer heavy soil. But nearly all bulbs do well in heavy soil, especially if plenty of humus is added.

All soils require the addition of large amounts of humus. You should compost all weeds, leaves and small branches. If possible, add manure to this and when well rotted

and fine turn under and thoroly mix with the soil.

Fertilizers. Animal manures are the best. Use them with compost as explained. Do not use fresh manure except as a light mulch for certain growing plants and experiment on a few first as too much quickly destroys a plant. Do not add fresh manure or commercial fertilizer to soil just before planting bulbs or seed. It would be as logical to give a day-old baby a tough steak, a slab of apple pie and two cups of coffee. Fertilize only healthy, thrifty plants. What would you think of a Doctor who ordered a big meal for a sick man as a means of recovery?

Questions we are asked: May I cut off the tops of Daffodils (or Gladiolus, etc.) after they have flowered? How shall I treat my Amaryllis, Clivia, Calla or other bulbs after

flowering

The answers are logically determined by considering the life cycle of a bulbous plant. A dormant bulb contains a bud. If it is a spring bloomer this is a flower bud.

There is also much stored up food. This food is used in developing the roots, the perfection of the flowers and the first growth of foliage. By the time the bulb is thru flowering it has become much smaller, because this stored up food has been used up. By that time the roots and foliage are sufficiently developed to begin the process of rebuilding the bulb, making it ready for the following season. If well cared for until its next dormant period the bulb will become larger than before, produce offsets, sometimes also seed. But this period of growth after flowering is absolutely essential to the future functioning of the bulb.

Depth and Spacing often cause too much concern. Bulbs usually have sufficient adaptability to do well under widely varying conditions. In a general way, bulbs should be about two or three times their diameter apart. Small bulbs like Ranunculus No. 3 may be covered 1"; bulbs the size of a Daffodil covered 4" to 6". Bulbs with a heavy top need deeper planting to maintain an erect position. Planting in light sandy soils should be deeper than in heavy soils. In very cold climates, deep planting protects bulbs from damage by frost. Few bulbs are too finicky about their depth and many of them have the ability to correctly adjust themselves to the most favorable depth if left in one place a few years.

Alibis. Many amateur growers refuse to accept responsibility for their failures when they result. They blame the bulbs, but not themselves, the weather, their soil or pests. Therefore they do not learn from the best teacher—experience. Luther Burbank

said, "A failure is an accomplishment." It is, if you learned by it.

References. All good gardeners use every possible source of information. Subscribe for the best garden magazines. One of the most complete compendiums of garden information and plant names and descriptions is Bailey's Cyclopedia of Horticulture, 3 vol., 3600 pages. Price \$15.00, postpaid. Send us your order and add sales tax for California delivery.

#### ACID AND ALKALINE SOILS

Most plants thrive in neutral, mildly acid or mildly alkaline soils equally well as they have a wide range of adaptability. But a few require alkaline soils and some will thrive only in distinctly acid soils. In the latter class are included Rhododendrons, Callas and most shade loving plants.

The acid-alkali balance is expressed in pH units. pH 7 is neutral. Below that the

acidity increases, above it the alkalinity increases.

Soiltex Outfit. This little testing kit will enable you to determine the pH of your soil. No chemical knowledge is required. Directions for use are included with lists of

plants and their preferred pH. Price is \$1.00.

If soils are too alkaline or if plants to be grown in them require more acidity the best remedy is to incorporate much humus. Peat is most acid usually, tho some American peat has become alkaline. Oak leaf mould is more acid than other leaf moulds. Use much leaf mould or peat (preferably imported) for Gladiolus, Callas, Arums, Lilies,

Haemanthus, Nerines and all plants that require acid soil.

Rootone. We know of really remarkable results from the use of Rootone, a plant hormone powder that induces quicker rooting of cuttings and bulbs and sprouting of seed. As a result of its action, especially mentioning bulbs, a more vigorous root system is quickly made and thus the flowers are earlier and larger; the foilage stronger and when dormant the bulbs will be found to be larger and with greater increase in number. We suggest you just touch the base of a bulb to the powder until covered by a thin film. Or you can apply it with a soft brush or from a salt shaker after bulbs are set. Dip the end of Cuttings into the powder. Tumble the seeds in a jar or in the seed envelope, with the powder. When seeds are coated, roll them out and save remaining powder. Treat your victory garden seed. Rootone will treat from 60 to 300 times its weight of seed and thousands of times its weight of bulbs.

We especially advise its use with spring planted Amaryllis bulbs as at this time the

roots are likely to be absent or mostly dried up. Sometimes they do not root easily if

not expertly handled.

Price. One-half ounce is a good supply. Mailed, postpaid for 50c. Use directions above. We can supply in 1 lb. cans (for extensive plantings) at \$5.00. F.O.B. La Verne or postpaid for \$5.35.

Vitamin B<sub>1</sub> is a useful stimulant for plants, we believe. We have soaked the roots of Amaryllis in flower, when transplanting, in the solution and the flower was uninjured, lasted for days and seed were ripened. We have used it successfully with other plants in transplanting.

Prices. 200 Tablets, \$1.00. 100 for 60c. 50 for 35c. 25 for 20c.

Directions for use. applying only to our own tablets. In transplanting bulbs or any plants, loose roots, dissolve 5 tablets in 1 gal. water. Soak roots in this 15 to 30 min. Pour solution around plant when set.

To stimulate growing plants, for the first application dissolve 1 tab. in 2 gal. water.

For succeeding waterings, use 1 tab. to 4 gal. of water once a week.

Warning. Do not soak dormant bulbs in vit. Bi sol. It rots them.

Maintenance is not a difficult problem for the average gardener who does his own work. But for large gardens that must depend on outside help or for those who are now employed in industries that require more time away from home than was formerly given, there is this problem.

For the latter, we remind you that a weary worker will find much relaxation even from manual labor in an hour's work daily in the garden. If the work be clerical, the

home garden work is even more useful.

For estate gardens the difficulty of obtaining help is not too great. Good professional gardeners who will give their entire time to your service are more rare. But why not give more of your personal time to your garden? It will do you good. Less golf, less social activity requiring trips by auto, allow more time at home. There are many older men who would like to work, many boys who will work Saturdays or after school under your supervision. Your own children need to work and to learn the lessons a garden teaches. There are also many who are not eligible to military service or war industries because of deficiencies. They too want jobs and they want to be useful. Pay good wages, you can afford it. If you pay well, the news spreads and you will have plenty seeking jobs.

The necessary work can be greatly reduced by using a wheel hoe instead of a "slow" hoe. Mulch the ground and thus reduce the amount of necessary tillage. Plant a very low growing cover crop between rows of Glads, Narcissus, Crinums, etc. For this purpose Sweet Alyssum is very good. If it gets too tall or heavy, cut back or thin out a

little with a sharp hoe.

#### **Bulbs for Window Gardens**

They are most satisfactory of all. My first recommendation is a hybrid Amaryllis (or Hippeastrum). For more than 100 years it has been the favorite and our Select Strains are unsurpassed. Clivias are equally desirable but more rare. For a very rare exotic try a Haemanthus. The following are all excellent. Sprekelia formosissima superba, Tulbaghia violaceae, Agapanthus, especially the dwarf mooreanus minor, Chlidanthus, Cyrtanthus and many other Amaryllids.

Bulbs of the Arum Family, Callas, Sauromatum and Amorphophallus are favorite pot

plants.

Anemones and Ranunculus should be tried in pots. Use the larger bulbs.

Among plants suitable for window gardening the Billbergias are outstanding. If ordered before February 1, for \$1.00 you can get B. nutans with bloom bud started. Royal Robe violets are nice pot plants and flower well in a cool room. Later plant them in the garden.

Potting Directions. Be sure drainage is perfect, by placing broken crock over hole

and over that smaller pieces or gravel.

The soil should permit water to pass thru easily. Rich, sandy garden loam and humus in equal parts is best. For the humus, combine peat, well rotted dairy manure and leaf mould. For acid loving plants use more peat. Bone-meal, a rounded table-spoonful to a 6" pot, thoroly mixed in is valuable to bulbs.

Some large bulbs, like Amaryllis, Crinums or Veltheimia may be potted with half the bulb above the soil surface. But some of them do better (and all will do well) with the bulb just covered. Smaller bulbs like Cyrtanthus, Ranunculus or Zepthyranthes should be about ½" to 1" deep. If there are no living roots, dust the base of bulb with Rootone

for surer, quicker growth.

When potted, firm the soil around the bulb and water once. Set the pot in a cool room. Before they start, too much heat and moisture will often rot the bulbs. Usually no more water is needed to start growth but the soil should not be completely dry at base of bulb. When growth begins, gradually increase the heat and moisture.

Size of pot should be about 2 or three times the diameter of the bulb.

**Temperature.** The hot, dry air of living rooms is often not best for either plants or people. For bulbs it should be not often over 70°, and at night not below 35° to 40°. Most of them like cool rooms. Many bulbs, like Freesias, fail because of too much heat. Amaryllis like more warmth when started.

### Arrangement of this Catalog

is by plant Families, rather than alphabetically. Customers have approved this plan because of the increased information possible. It requires a little more study to locate a desired bulb but we try to make the catalog worth your careful study. It is better to save all catalogs as the culture suggestions are frequently revised or presented in a different way. There are no "authorities" on culture that are equal to your experience. Our 1942 Fall Catalog contains much culture information omitted in this. If you do not have it it is free for a stamp. Keep all our catalogs in your garden library.

### THE AMARYLLIS FAMILY—Amaryllidaceae

This family includes the bulbs from Agapanthus and thru The Alliae.

The American Amaryllis Society is an association of those thruout the world who grow Amaryllids as an interesting and intellectual hobby. An annual book "Herbertia" of about 250 pages is sent to each member. Therein is discussed the best culture methods; descriptions of new species; notes on Amaryllids in their habitat; reports on experiments in crossing, in culture, propagation, etc. Herbertia is the essential book of reference on Amaryllids. Beautifully illustrated. I invite you to send me \$2.00 for membership. You will receive volume 9 of Herbertia for 1942 as soon as published. It is now on the press.

Bulb lovers who specialize in the Amaryllis Family would enjoy having the complete set of 8 vol. of Herbertia 1934 to 1941 inclusive. Price \$23.50, postpaid. Several

issues will soon be out of print and never again available.

How to Grow Amaryllis. This discussion includes not only the genus Hippeastrum, which recently botanists have changed to the old popular name of Amaryllis, but will also include the entire family of Amaryllids.

Such winter growing Amaryllids as Callicore rosea, Haemanthus coccineus, Hippeastrum advenum, Lycoris, all species, Nerines and Sternbergias should be ordered now or by early spring. Thus we can send them as soon as dormant. That is the correct

time to move them. If moved next fall they may not flower.

Hardiness. Most Amaryllids listed are hardy in the far south. Amaryllis, Cooperia, Amarcrinum, Agapanthus, Callicore, Cooperia, Crinums, Habranthus, Hymenocallis, Lycoris, Pancratiums, Sprekelia, Sternbergia and Zephyranthes are hardy on the coasts to North Carolina and to Vancouver. Inland, most of them have been grown with protection at Washington, D. C., parts of Arkansas and the middle south. In this border line,

plant deeper and in a protected location like the south side of house or wall. Mulch well in winter or cover with cold frame. Hippeastrums (Amaryllis) are unlikely to survive in the outside garden at temperatures below 20°.

Winter hardy in the north are Crinum longifolia, Lycoris squamigera, L. incarnata, and Leucojums. Only slightly less hardy are Crinums moorei, Cecil Houdyshel and

Powelli. In milder sections, plant deep and mulch well with brush.

Most Amaryllids are gross feeders. Properly used, animal manures are best.

Amaryllis (or Hippeastrum) Hybrids.

When bulbs are received, pot at once. Be ready with soil and pots in advance. If received in the fall, many living roots will be attached, and often a few even in late winter. Remove only dead roots and ends and carefully spread out all live roots when potting. Even if no roots remain, they will grow and flower tho foliage may be produced later.

Spring potted bulbs will root much more quickly and easily if the base of the bulb

is dusted with Rootone. (Send 50c for ½ oz.)

A bulb under 3" diam. needs a 6" pot. Larger bulbs should have a 7" to 8" pot

in proportion to the size.

The best potting soil is a friable loam, avoiding heavy clay soils. To this add an equal volume of the following mixture composed of equal parts of sand, well rotted cow manure, rotted leaf mould and peat. Best to rub thru a screen to make fine and mix thoroly. Leaf mould may replace peat. Bone meal is recommended, 1 tablespoonful to each pot. Mix all thoroly.

Pot the bulb with neck and upper bulb surface exposed. Water well but after that keep the soil only slightly moist until growth starts, then gradually increase. When first potted set the bulbs in a cool, light room. The best temperature now is 45° or 50°. Later the pots may be removed to a room of about 60°. Buds will usually have shown.

After flowering, the bulbs will be shrunken and perhaps soft. A period of growth is necessary to fill them out and increase their size. If good growth is made at this important stage the bulb will be much larger than in the preceding year and offsets may be made. It is necessary to keep them growing for as long as possible. When the weather is warm outside the pots may be plunged in the garden or the bulbs with entire, unbroken clump of roots and earth may be removed from pot and reset. Bulbs may be planted in full sun, but slight shade is good where very hot summers prevail. When bulbs are well established give liberal mulchings of dairy manure. Use stable manure carefully. It is good but very strong. Before heavy frost remove to house. Allow them a rest for several weeks but do not allow pots to dry out completely. The temperature of 45° checks growth. When you want them to start, bring to 60° and water a little. You can become expert in obtaining flowers every year.

Other Amaryllids. Further culture advice is given, where necessary, with the

descriptions.

### List of Amaryllids

Agapanthus. Blue Lily of the Nile. The name means Love Flower. Blooms in late spring and summer. Large, most attractive flower umbels on tall, erect stems. Universal favorites in south and easily grown in north in tubs or buckets, wintered in basement. Half shade to full sun.

Agapanthus Africanus, var. Mooreanus minor. A dwarf form especially suited to pot culture. Lovely blue umbels on 18" stem. Likes good garden loam, partial shade. Deciduous, but should not be entirely dry over winter. 35c ea. 4 bulbs for a 6" pot, \$1.25.

A. longispathus. New species. Flowers resemble Orientalis but blooms more pro-

fusely and is more graceful. 75c. 3 for \$2.00.

A. orientalis (umbellatus). Our variety is an especially fine one with deepest blue flowers on a tall stem. Many flowers are produced in spring and thru summer. 50c. Extra large roots, 75c.

A. pendulus. Entirely new and distinctly different species of greatest value. Flowers in shades of blue and purple in a great variety. Flowers long, tubular and pendulous when open. The umbel is smaller but most graceful. Like "mooreanus minor" it is deciduous and should be ordered before April 1. \$1.50.

Amarcrinum Howardii. A bigeneric hybrid between Crinum moorei and Amaryllis belladonna. Flowers, pure pink, produced most any time of year. Almost sold out and can only offer a blooming size for \$1.50 ea.

Amaryllis belladonna. Name recently changed to Callicore rosea but present nomenclature of the varieties has not yet been adapted to this. The popular names, Surprise Lily, Naked Lady Lily and Lady Godiva Lily are descriptive of the fact that the flower stem produces its exquisite umbel of pink flowers, unclothed by any foliage. The flowers have a rich, delicious and distinctive fragrance. A standard cut flower in the south.

Culture. The bulbs bloom here from late July to about August 1, depending on variety and culture. To make them flower later withhold water. Later, foliage appears and grows all winter until about June 1. They should be dug and moved in July for best success. Unfortunately, it is customary to order these in the fall when they should be established and ready to flower. As a result, they usually flower soon after planting but may skip the next year. We ask you to order now or before June and we will deliver them at exactly the right time.

Plant bulbs at once when received, preserving all roots. Top of bulb should be a little below surface, and deeper in colder sections. Amaryllis are semi-hardy and foliage frozen by a temperature of 15° to 20° easily recovers. With proper protection they may be grown as far north as Washington, D. C. or Vancouver, B. C.

They are not very successful as pot plants but bulbs bloom the first year usually and one flower stalk is worth the price of a bulb. Planted in a bucket or tub and wintered in a basement window I believe they would succeed. They need water all winter, but a cool temperature.

- A. belladonna major. Earliest and largest. Pure pink. 35c. Large, 50c. Jumbo, 75c.
- A. belladonna minor. White throat, later flowering. 60c.

**A. belladonna,** var. **Ethel.** This, our seedling, is probably only a good clon of the var. "rosea." Dark rose, with white throat which turns rose. Late. Very beautiful. \$2.00.

**Bravoa geminiflora.** Mexican Twin Flower. Plant and bulb resembles Tuberose and is related. Twenty or more coral red flowers are "twinned" on a 20" stem. Culture like Tuberoses. 30c. Top size, 40c.

Chlidanthus fragrans. Deep rich golden yellow flowers. Entrancing, spicy fragrance. Three or four flowers in an umbel on a 10" scape. Plant 3" deep, in full sun. M. 15c. L. 25c.

Clivia. They rank with Orchids in the ambition of every flower lover to possess one. But unlike Orchids they are easy to grow. They have been rare and expensive because of their slow increase. Old plants make offsets, but too slowly, hence growers must plant seeds. These require 5 to 7 years to flower. By our culture methods, we have been able to increase them more rapidly and to reduce prices.

The flowers are borne in a large umbel, often 20 or more, on a scape that lifts them above the foliage. The colors are in tones of orange, from orange yellow to red orange in the hybrids. Their beauty is unsurpassed. Decorative seed pods will follow the flowers and these remain a full year, turning red in late winter. The plant is decorative in all seasons.

Culture. They are usually grown in pots, even in the south, as more perfect foliage is thus possible, and when in flower one wants them in the house. We grow them in a lath house, lath spaced ½" apart and in garden under Avocado (evergreen) trees. They must have shade with only a few flecks of sunshine, but plenty of light and air.

In pots, the plants must have perfect drainage and a good pervious loam. Use about the same soil as for Amaryllis. For large plants use a 10" to 12" pot or even larger. Give smaller plants 5" to 8" pots. Do not trim living roots, but crowd them all into pot. They flower better when root bound.

Clivias are evergreen, with deep green, strap-shaped foliage. They must never be allowed to lose the foliage. Encourage growth through spring to fall with plenty of water and frequent feeding with manure water. The plants should rest a few weeks in winter until about late February. At this time reduce the water but do not allow leaves to wilt. Hot winter rooms are very bad. Keep them cool, not over 60° or 70° nor under 35°, although ours are not injured out doors by temperatures as low as 26°.

No one can guarantee a Clivia to bloom. The only sure way is to order one in bud to be delivered at the proper stage. This requires more careful handling and packing and costs more. We have had 100% success in handling plants this way.

C. miniata. Wide open flowers of soft yellow orange. It is first to flower, late December to February, the hardiest and easiest to grow. Prices \$1.00 and \$2.00 ea. The \$1.00 size often flowers but is not so sure. We can furnish plants with bud, the only sure way to have a flower the first year, for \$2.50. But order at once for a flower.



Clivia, blooming one week after receipt by our customer.

or \$2.50. But order at once for a flower

C. miniata hybrids. These are rather close to miniata, similar in foliage, hardiness, wide open flowers, etc., but there is variation in color. Most of them are in lighter orange tones but some are much darker. No choice of color is offered, as they are not marked. They flower about March. Three blooming sizes, at \$2.50, \$3.00 and \$3.50 ea. Very often plants moved at this time do not flower the first year unless already budded. We will ship plants with bud, sure to bloom in two larger sizes for \$3.50 and \$4.00 each.

C. nobilis hybrids. A fine European strain. Foliage broad with rounded apex. The large flowers range from apricot-orange to red-orange. Large plants, \$10.00. In bud, \$12.00.

N. B.: Please cooperate and do not state color preference in Clivia hybrids. No choice is possible.

Cooperia pedunculata. Texas Rain Lily. Close to Zephyranthes but larger. Lovely white flowers appearing after rains in summer. Hardy except in far north. In central sections it may be planted to 6" deep for frost protection. It may be dug and stored over winter in north. 15c.

Crinum. Species of this large genus are native to every continent. They are most

attractive plants for their foliage alone and with the addition of their fragrant, lovely flowers they are indispensable for southern gardens, for the landscape effect among shrubs and trees. The flowers are useful for cutting and many florists use the individual flowers in sprays.

Culture. The species Longifolia is hardy in milder sections of the north. There it should be planted quite deep in a protected place and mulched over winter. C. moorei. and the hybrids derived from them, Cecil Houdyshel, Powelli, etc., are only a little less hardy. Any Crinums, except such tropical sorts as Amabile, should be hardy in the middle south where Amaryllis belladonna can be grown. In the north, even the largest sorts may be grown in an 18" tub and wintered in a basement.

While Crinums prefer a deep rich loam, all will do well in heavy soils except Amabile and Augustum. All appear to do better with slight shade but with the exception of C. moorei, Virginia Lee and Gordon Wayne, they do very well in full sun. These must have considerable shade.

Crinum amabile. One of the most beautiful. The freely produced flowers are crimson purple and possess the richest fragrance. Give them a rich, deep sandy soil, feed and water them well. S., \$2.00. M., \$3.50. L., \$5.00. Jumbo bulbs, \$6.50.

- C. Americanum. Native to southeastern U. S. The species is variable and some forms do not succeed well away from their native swamps. We offer a form long grown in California, that does exceptionally well. Flowers blush white, Increases by underground stolons, soon making a large clump. 75c.
- C. campanulatum. Belongs to the "Milk and Wine Lily" type. That is, the flowers are white with a bright rose stripe thru center. L., \$1.75. M., \$1.00.
- C. Cecil Houdyshel. Flowers, deep rose pink. One of the best hybrids, all qualities considered. It is the same cross as C. Powelli but is much larger, more robust and instead of flowering in but a limited period it is almost a perpetual bloomer. Large bulbs often produce 7 or more flower scapes in a year, the most profuse of all. The great demand for this variety took all our smaller sizes and we were unable to list them last year. But now we can offer small bulbs for \$1.50. Good blooming size \$2.00. Jumbo bulbs, weighing several pounds \$3.50.
- C. Ellen Bousanquet. Most outstanding. It is most surprising to see a Crinum with such dark, glowing wine red flowers. Very vigorous and easy. Large bulbs, \$1.50. Blooming size, \$1.00. S., 60c.
  - C. erubescens. Milk and Wine type. The center stripe is red-purple. 50c.
- C. Gordon Wayne. (Our 1938 Introduction). Large pure white flowers. A seedling of Virginia Lee and thus is probably the first third-generation hybrid. Price \$4.00.
  - C. H. J. Elwes. Pink flowers of unusual beauty. \$2.50.
- C. kirkii. One of the most desirable of "Milk and Wine" type. White flowers with red center stripe. The large umbels have many flowers open at one time. 75c ea. Per doz. \$7.00.
- C. longifolia alba. (Sny. Capense alba). White lily-shaped flowers. This is the hardiest species, surviving the winters with protection if planted deep, as far north as Ohio. Better than rosea. 50c. \$4.00 per doz.
  - C. longifolia rosea. Pink flowered form. 60c.
- C. Louis Bousanquet. Very free flowering thru an unusually long season. Pink flowers on a very tall, erect peduncle. \$1.00.
- C. moorei. Large pink, bell-shaped flowers in the fall, freely produced. The long neck of the bulb surmounted by rotated broad leaves give the plant great decorative value. Requires shade. Nearly as hardy as longifolia. 50c.

  C. powelli alba. Extra fine pure white. One of the most valuable and beautiful

Crinums. 50c ea. per doz. \$4.00. 25 for \$7.50.

C. Virginia Lee. (Our 1934 introduction). Large pink flowers with white throat. A second generation hybrid produced by the cross Cecil Houdyshel x J. C. Harvey but re-reverting in many characters to its ancestor on both sides, C. moorei, in its necessity for shade, heavy seed production and mid-summer loss of foliage. These characters are also shared by its seedlings, Gordon Wayne and many not named. Price \$2.50.

Cyrtanthus. Close to Zephyranthes, but tender. Long tubular flowers in umbels from December to March. Unless ordered at once, no flowers may be expected this year. For the garden in south. Nice pot plants in the north.

Cyrtanthus augustifolius. Orange red flowers. 50c.

C. lutescens. Bright yellow flowers. 25c.

C. mackenni. Ivory white flowers. 25c.

Elisena longipetala. Rare Peruvian amaryllid. Bulb and plant much like Ismene and culture the same. The flowers are more dainty and attractive. Pure white with long, narrow petals, giving a most graceful form. \$6.00 ea. Largest, \$7.50.

Haemanthus Katherinae. The bright light red flowers fill a large rounded umbel often 10" or more in diameter. I have counted nearly 125 in an umbel, yet the flowers have delicacy and grace and are neither too small nor crowded. The broad banana-like

foliage droops gracefully into an umbrella form. Scarlet seeds follow the flowers. A plant in flower is an unforgettable sight of tropic beauty. Introduced from Natal in 1877 they are yet rare. There are certainly not many hundred in the United States.

There is a short dormant period between January to March. Order early. They flower in June usually, but sometimes in September. Price \$7.50. A few extra strong bulbs for \$10.00 ea.

H. multiflorus. Not exactly a smaller edition of Katherinae but smaller and much like it. The umbel is nearly as large, composed of 60-100 blood red flowers. It is said that plants in bloom have sold for \$25.00 in flower shops. The bulbs have a little longer dormant period but should be ordered early, not later than March. Blooming size, \$3.00. Larger bulbs for \$4.00.



HAEMANTHUS KATHERINAE

Haemanthus. Blood Lily. I must admit a great love for this genus. Not only because of their rarity, but because of the unusual and distinctive beauty of some species and their great diversity in form and growth habits. The problem of correct culture presented a challenge which books do not solve. We now have 7 species and will be able to offer others later.

Culture. They should be grown in pots except in climates like Florida and So. Calif. The soil should be equal parts of loam, sandy enough to feel gritty and peat or leaf mould made thoroughly fine. Drainage should be perfect. A tablespoonful of bone meal to each plant is useful. The species listed here require cool shade, little sun, but light. An abundance of water at all times when growing is required but rather on dry side during late winter dormancy. But not bone dry. When bulbs are received pot at once and water. Do not water much before growth starts. Altho a little warmth favors

earlier growth and flowers it may be easily overdone. They like cool, but not cold temperature. The following are tender tropicals.

H. puniceus. (Formerly listed as possibly Lindenii.) Leaves 10" long, evergreen. A small umbel of nearly 100 tiny scarlet flowers appears in late summer. Flowers are followed by red fruits. Although it lacks the spectacular beauty of the others, it is attractive all the year, very unusual and is easy to grow. It does well in half shade. \$2.50.

Hemerocallis. Day Lilies. A most satisfactory and dependable perennial, easy to grow. A collection will give masses of flowers here for 6 months.

Culture. Hardy everywhere. They do well in any good soil, in full sun, but in slight shade and rich loamy soil with plenty of moisture they reach perfection. Delivery any time but flowers are more likely to result the first year if ordered before April 1.

Hemerocallis Calypso. Large, fragrant lemon yellow flowers in July and August. 3½' tall. Night flowering, 25c.

- H. Crown Prince. Color like Mikado. Flowers smaller but more perfectly modeled and more freely produced. We sold this for a high price quite recently but it increases most rapidly and we can offer you plants at the price of common species. 15c. 6 for 70c. 12 for \$1.20.
- H. Dauntless. Pale cadmium yellow, greenish throat and delicate fulvous red in center of petals. 2½. July-August. \$2.00.

H. florham. Fragrant, soft yellow. Frilled petals. 25c.

H. fulva. Orange flowers in July-August. 25c.

H. Geo. Yeld. A huge flower on a 4' stem. Blend of buff, apricot, orange and terra-cotta. 75c.

H. kwanso. The double fulva. Orange, 20c.

H. Margaret Perry. Brilliant orange-scarlet. 4'. July-August. 35c.

H. Mikado. Orange with large mahogany red spot in each petal. 3'. June-July. 75c.

H. Radiant. Rich orange. 75c.

H. Soudan. Clear lemon yellow. Broad petals with wavy margin. 3'. July. \$1.00.

H. Vesta. Deep orange with gold sheen. June-July. 75c.

H. Vulcan. Large flower of darkest maroon red. Rare. \$2.50.

H. Wau-bun. Light cadmium yellow, lightly sprinkled with fulvous red. Ranks near top of the best. 3'. July-August. \$1.25.

## Hippeastrum or Amaryllis

The latter name, always more popular, is again being used by the latest botanical writers.

They are the most popular of all bulbs for growing in pots. The newest and best hybrids which we offer, afford most vivid colors in countless tones of red, scarlet, rose pink and white background with light color markings. We are frequently asked for white. Pure white are rare. Good ones are worth up to \$25.00 each. They are more difficult to grow, less hardy and die easily.

The Burbank hybrid, "Sibyl Houdyshel," our "Near Whites" and "White Backgrounds" give the general effect of a white amaryllis and are recommended instead of

the pure white.

Many judge an amaryllis bulb by its size. It's value depends rather on the quality of flower it produces, though naturally its value increases with size. The ideal flower has broad rounded petals, clear pleasing colors with little or no green in throat. These are more important qualities than size. An 8" flower is large enough though many are larger.

As an intellectual hobby, growing fine Amaryllis and crossing them, growing the seed, to produce color variations, will afford you much pleasure. No two seedlings are

ever exactly alike.

To do this, place the powdery yellow pollen from one on the central pistil of another. Seed will usually set. When ripe and dry, plant at once. Cover about ½". If soil is moist they often come up without further watering if pot be covered by pane of glass, but do not allow them to dry out now or later. Seedlings often bloom when 2 years old. We have no seeds for sale. No one sells their best. Grow your own from our select strains, the best.

Hippeastrum Hybrids. Assorted Colors. These are selected from a variety of sources No poor flowers. 50c ea. Special, \$4.50 per dozen. Extra large bulbs, 75c ea. This

strain is very hardy and easy to grow.

H. Near White Hybrids. Some have very light pink markings, others heavier but none heavily marked. They give the general effect of a white flower. This is a very vigorous strain unlike the pure white. Rich, spicy fragrance. Rather later in blooming.

75c ea. \$7.50 per doz.

H. Hybrids, Select Strains. This lot is composed of the best of American and European breeders. We consider this the best commercial strain now available. The petals are nicely rounded, in a perfectly moulded flower. The colors are refined and in countless tones from white background with light markings to various tones of pink, rose, red and scarlet. The flowers are large, sometimes 8" or more in diameter. We offer these in the following color classes. Assorted Colors; White Background, from nearly white to medium markings; Red Shades, Scarlet and Pink. Be sure to order as H. hybrids, Select Strains, Assorted Colors, White Background, Red, Scarlet or Pink. 2¼" to 2¾" bulbs, 75c ea. 3 for \$2.00. \$8.00 doz. Larger, older bulbs, fresh dug for each order, with complete root system in any color except pink, 2¾" to 3¼" diam. \$1.50 ea. Jumbo bulbs, 3¼" up, \$2.50 ea.

H. Diener's Posthumous Hybrids. Raised from seed of his own crosses and planting. Diener's ideal was the widest flower; his claim 10" to 16". Personally we prefer the more perfect form of the Select Strains. Assorted colors only. Must be ordered early as they are dug only on order, with full root system. Price, 2½" to 3", \$1.50. 3"

up, \$2.50.

H. ambiguum. Tall scape with umbel of 5 to 7 flowers. Pure white with pink lines. Rich fragrance. Rare and fine. \$3.00 ea.

H. Johnsonii. The first hybrid. Although common it is a universal favorite because



AMARYLLIS, "SIBYL HOUDYSHEL"

of its rich coloring, ease of culture and rapid increase. Deepest red with broad white band through center of each petal. Bulbs, 2" - 2½", 40c. 2½" - 3" 60c. Over 3", 75c.

H. Sibyl Houdyshel. Pure white with a narrow pink line on border, flushed and lined pink in throat. Very fragrant. Sturdy grower and propagator. Burbank origination. Price \$6.00. No small bulbs for sale. No Wholesale discount.

H. McCann's Double. As double as a rose, with often 20 or more petals. Shades of red or scarlet. Sometimes difficult to grow and your success is not guaranteed. Try very sandy soil. \$1.00 ea. Larger bulbs \$1.50.

The following group belongs to the sub-genus Habranthus and are sometimes listed as Habran-

thus advenus, robustus, etc.

H. advenum. Ox-Blood Lily. This is a fall bloomer and winter grower. Small dark red flowers in an umbel of 7 or 8. Very hardy and will stand at least 12° below freezing. Probably

safe to plant quite far up toward north. Plant 6" deep, full sun. It should be planted in every garden in the south and middle-south. On the coasts, north to Vancouver and N. Carolina. 25c ea. \$2.50 per doz. June to July delivery.

H. brachyandrum. Rare. Has a single-flowered umbel. Bright, deep lavender pink. S., \$1.00. L., \$1.50 ea.

**H. robustum.** Sometimes, in error, listed as a Zephyranthes. Has one large lilac pink flower. 15c.

**H. texanum.** This name may not be correctly determined as we have two types. One has broader foliage and the flowers and shape of bulb differ slightly. Small plant with yellow flowers in mid-summer. State whether you want the broad or narrow leafed type. Both for 45c. Price each 25c.

**Hymenocallis.** This genus includes the Spider Lilies and Ismene. The Ismene is deservedly one of our most popular bulbs but few know that new improved forms and hybrids have been produced. The almost ethereal beauty and the fragrance of Spider Lilies is known by few.

**Culture.** Hymenocallis are hardy in southern gardens where temperatures do not go lower than perhaps 15° above. All do well in pots. Both Spider Lilies and Ismene in the north may be grown outside in the summer and dug and stored in winter, the Gladiolus method. Plant Ismenes 4" deep, 6" apart. Smaller species not so deep.

Hymenocallis calathina. The Ismene or Peruvian Daffodil. Large white, fragrant flowers, veined green with a daffodil-like cup. L. 25c. M. 15c.

**H.** calathina minor. A very small Ismene of interest to collectors and useful in dainty arrangements. 60c.

**H. calathina "Advance."** Larger, whiter and more profuse. This and the next three are improved Ismenes. \$1.00 ea.

H. festalis, Ismene X Elisena hybrid. Very beautiful, pure white graceful flowers. \$2.00.

H. festalis, Triumph. Larger flowers. \$2.50.

H. Olympia. Creamy white, the largest Ismene \$5.00.

H. Galvestonensis. Texas Spider Lily. Probably hardy as far north as Tennessee. Plant 6" deep or more. 25c.

H. sp. No. 1. Dwarf Spider Lily. Very dainty white flowers. Blooms easily in

pots. 10c.

H. sp. No. 2. Tropical Spider Lily. Very large, fragrant white flowers of great beauty. Easy in pots. 50c.

Leucojum aestivum. Hardy in north. First flowers in spring. 5-flowered umbels,

white petals with a green dot. 10c ea. 50c doz.

Lycoris are fall blooming Amaryllids. Bulbs will be delivered about July when dormant. That is the best time to move them. Squamigera and Incarnata are hardy in the north. Plant 4" deep.

Lycoris incarnata. Flesh pink with reddish markings. \$2.50.

L. radiata, Red Spider Lily. Vivid red flowers. One of the south's best bulbs. 25c. Five for \$1.00.

L. squamigera. Amaryllis Halli. Lilac pink in an umbel much like A. belladonna. \$1.00.

Nerine. Among the most beautiful of Amaryllids, but little known. Though tender, they are easy in gardens of Florida and Southern California and all have survived temperatures down to 20° except N. filifolia. All are ideal for pot culture in north. N. filifolia blooms first in September, followed by Fothergilli hybrids, Rosea crispa and in December, Bowdenii. Last of all is N. Bowdenii, var. Pink Beauty now on January 1, in full bloom.

Give them sandy loam soil and leaf mould or peat in equal parts. Water freely when

growing and withhold water when dormant.

Delivery is made as soon as dormant. N. Bowdenii now. Some as late as June but N. filifolia any time.

N. Bowdenni. Ten or more large rose pink flowers in an umbel. Should be

ordered at once as the bulbs are dormant only a short time. \$1.00.

N. Bowdenii, var. Pink Beauty. Much larger. Blooms later and is the largest and most exquisite of Nerines. Very rare, but a good multiplier and you can soon have a clump from one bulb. \$6.00.

N. filifolia. Very dainty and exquisite pink flowers. Evergreen foliage. Rapid multiplier. They must be crowded to flower well. Three for 25c. 12 bulbs, enough

for a 6" pot, 90c.

N. fothergilli hybrids. Assorted colors from the deep red of its seed parent to various shades of pink. To my chagrin I thought these were all the red "fothergilli" and listed as such. Bulbs sold may be returned if desired. \$1.50 ea.

N. rosea crispa. A hybrid with larger flowers like N. filifolia. Blooms later and by keeping them dry the flowers may be had in mid-winter. 30c. Extra large, 50c.

Pancratium maritimum. Fragrant white flowers in late summer. Resembles Ismene.

Easy culture. Plant 4" deep. 15c.

Polianthes tuberosa. Tuberose. Pure, waxy white flowers on a 24" spike. The fragrance is rich and spicy. In the garden they perfume the entire neighborhood. A favorite for cutting. Culture very easy. Plant 4" deep in full sun exposure.

Polianthes tuberosa, Double Pearl. Very double flowers. The favorite variety. 6c

ea. 50c doz. 30 for \$1.00. \$2.50 per 100.

P. tuberosa, Mexican Everblooming. Single flowers. Same prices.

P. tuberosa, assorted varieties, mixed blooming sizes, 40c doz. 100 for \$1.50.



SPREKELIA FORMOSISSIMA

Spreckelia formosissima superba. The Orchid Amaryllis. Crimson flowers of orchid-like form. The flowers are twice as large as the common type and the color better and much more freely produced. It is probably a Sprekelia-Hippeastrum hybrid and may be Burbank's long lost hybrid "Martinique."

An extra fine pot bulb as it is a good winter bloomer. Culture same as Hippeastrums. Jumbo

bulbs, 75c. L. 50c. M. 35c.

Sprekelia formosissima, type variety. Less de-

sirable. 3oc.

Sternbergia lutea. A winter growing, bright yellow Amaryllid often called "Fall Crocus." Most desirable. Hardy in middle south. Culture. Plant 3" deep. It should be moved as soon as dormant in late spring or early summer as they usually flower too early in the fall for fall planting. Extra jumbo bulbs, 5oc. L. 35c. Blooming size, 25c.

Tulbaghia violaceae. Small cousin to Agapan-

year, a true perpetual bloomer. Foliage has garlic odor if bruised. An acquisition for

pot culture. 35c. 3 (for a 5" pot), \$1.00.

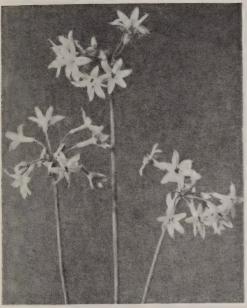
Zephyranthes. Fairy Lilies. The smallest Amaryllids, 6" - 12" tall. Fine in beds or borders. Hardy in middle south. In north dig and store. They may be grown in pots. Give acid soil, sandy loam with peat or leaf mould.

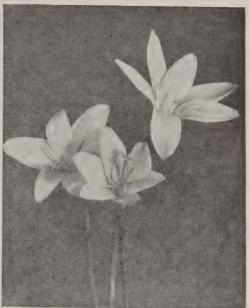
Zephyranthes ajax. Hybrid. Flowers, cream to dark yellow 15c.

Z. candida. Often called white Crocus. Best pure white. Evergreen. Very easy.

Flowers mid-summer to fall. 3 for 10c. 30c doz. 50 for \$1.00.

Z. citrina. Best deep yellow. Rare. 20c.





#### TULBAGHIA VIOLACEAE

#### ZEPHYRANTHES GRANDIFLORA

**Z.** grandiflora. Often listed as rosea or carinata. Pink. The largest Zephyranthes. 10c ea. 75c doz.

Z. rosea. The smallest Zephyranthes. Pure pink. 10c.

The Alliae or Onion Tribe are now placed in the Amaryllis Family. The following should have full sun. Sandy loam is best. Plant in spring, 2½" deep. In the north, dig and store bulbs over winter.

Allium schoenoprasum. True Chives. Lovely little plants and lavender flowers.

Flavor for soups, salads, etc. 2 for 10c. 6 for 25c.

A. sp. (probably A. tuberosum) Oriental Garlic. A very ornamental species. Lovely white flowers. Truly delicious in salads, leaving no breath odor. As they are winter growers they must be grown in pots in the north and they are worth it for their lovely flowers and the leaves for salads. 25c.

Bessera elegans. Very desirable for cutting. Flowers orange red outside, cream with orange stripe inside, in umbel. 18" stems. In north, dig and store bulbs over winter. 30c.

Milla biflora. Waxy, white flowers with green stripe on outside of petals in umbel. 15" stem. Cuts well. July - October. 15c.

#### IRIS FAMILY. Iridaceae

The Iris is the type plant of this family which includes the Gladiolus and those which follow here as well as many others listed in our Fall Catalog.

Tall Bearded Iris can be moved at any time. We list them in our Iris Price List.

If interested please ask for it. We offer here only one Extra Special.

Iris Golden Cataract. Pure deep golden yellow. It belong to the "Fall Blooming" type, but is more than that as ours show flowers in the field more than 9 months out of 12. It is the most profuse blooming Iris. This trait combined with its color makes it most desirable. Price 50c. Three \$1.15.

#### Gladiolus

In order to avoid damage by thrips to their flowers, Gladiolus should be planted early. In the north this means as soon as the ground can be worked and there is no more

danger of its freezing to the depth of planted bulbs.

In California, southern Arizona to southern Texas, where winters are mild they may be planted between November 15 and March 1. There is usually no difference in the time of blooming between bulbs planted November 15 or March 1. They bloom together, except when unusually warm winter weather causes earlier growth.

There is time yet to plant Glads in the south. In central to northern California and in coastal regions the limit may be extended to April 1. In the north, Glad planting

may be the first garden activity in the spring.

To avoid damage to flowers by thrips, three measures are effective. Use all three. Plant within dates mentioned. Plant treated bulbs. Irrigate by overhead sprinkling.

We sprinkle ours 30 minutes every evening.

Treatment. Mix 4 teaspoonfuls of Lysol in one gal. of water. Or use a large bottle of Lysol to about 40 gal. of water. Soak the bulbs in this solution for 5 hours. The solution may be used several times but discard it when one week old. This solution does not injure bulbs or delay their starting. In fact it hastens formation of roots. Other solutions usually retard growth. It kills thrips and disease bacteria. Do not treat recently dug bulbs.

This treatment is claimed to be equally effective in killing thrips on the bulbs. Sprinkle Naphthalene flakes over the bulbs in a closed bag or container. Leave them

closed up for three weeks then remove flakes and open the container.

Plant Glads 4" deep and twice their diameter apart. A double row may be planted

in a furrow. Small bulbs and bulblets 2" or 3" deep.

Glads need mildly acid soil. Strongly alkaline soils are unsuitable, producing poor flowers and poor bulbs. The soil should contain much humus. We like to mulch the rows with peat or leaf mould.

Explanation. L. means large, 114" or over, or No's. 1 and 2. M. means medium, 34"

to 1 1/4" or No.'s 3 and 4. S. means small or under 3/4" diam.

Albatross. Very large pure white. Tall. L. 6c. Per 100, \$3.50.

Allemania. Immense rosolane purple (or orchid) flowers on very tall spikes. The most gorgeous of all Glads. Plant deep. L. 7c.

Annie Laurie. Ruffled rose pink. L. 5c.

Betty Nuthall. Early, orange, pink, yellow throat. L. 5c. Doz. 50c. Per 100, \$2.25. Med. 25c doz. Per 100, \$1.25.

Bill Sowden. Rich deep red. Very large and extra fine. L. 5c. Per 100, \$3.00.

Com. Koehl. Immense, glowing scarlet. L. 6c.

Dr. F. E. Bennett. Flame red. One of best and easiest to grow. Favorite for cut-

ting. L. 5c. Per 100, \$2.50. Med. 25c doz. Per 100, \$1.35.

Dr. Moody. Early large lavender pink. Better and brighter than Minuet. L. 6c ea. Gate of Heaven. Purest rich, deep yellow. Ruffled. Well named. L. 6c. Per 100, \$4.00.

Golden Dream. The favorite tall deep yellow. L. 5c. Per 100, \$3.00.

Lavender Delight. Delightful and unusual color, rose purple. L. 6c.

Libelle. Heliotrope blue. The loveliest blue. L. 6c.

Los Angeles. Orange, tinted pink. One bulb produces more flower spikes than any other. Best winter grower. Such a rampant grower that it should be planted not closer than 6" for large bulbs. Also give more water for best flowers. L. 5c. 50c doz. Per 100, \$2.25. M. 20c doz. 100 for \$1.00.

Maid of Orleans. Beautiful white with creamy throat. 6c.

Margaret Fulton. Coral pink shading to rose doree on tips of petals. L. 7c.

Marmora. Tall, immense, smoky lavender. L. 5c. Per 100, \$2.25.

Minuet. The favorite lavender. L. 5c. Per 100, \$2.50.

Mrs. Leon Douglas. Tall, large, geranium pink, splashed darker. Plant deep. L. 6c. Pfitzer's Triumph. Immense salmon-red. L. 6c.

Picardy. The most popular Glad, for the garden or for cutting. Tall, extra large,

shrimp pink. L. 5c. Doz. 50c. Per 100, \$2.00. M. 25c doz. Per 100, \$1.00.

Radiant Orange. Our largest and best true orange. A combination of vellow orange, salmon orange, bittersweet orange and grenadine red. L. 6c.

Red Lory. Fine scarlet red with rhodamine purple throat. A fine red. L. 6c.

Souvenir. Pure deep yellow. Very fine for cutting. 5c. \$2.00 per 100.

The Orchid. Individual flowers in a corsage are easily mistaken for a cataleya orchid in both color and form. L. 7c.

Virginia. An old stand-by and there is no sweeter red. L. 5c. Per 100, \$3.00.

Wasaga. A lovely apricot. L. 5c. Per 100, \$2.50.

Mixed Bulbs. A lot of bulbs are mixed accidentally. Surplus sorts are added. Sometimes we discard new sorts that others like. This mixture in bulbs 1" to 1½" diam., sizes 1, 2 and 3 are offered at 45c doz. \$2.00 per 100. M., 100 for \$1.00.

#### Miscellaneous Irids

Marica gracilis. Walking Iris or Apostle Plant. Beautiful 2" flowers of white and blue with vellow and brown marking in center. The flowers are followed by a small plant. The leaf-like stem bends over and the plant takes root, thus walking away from the mother plant. Requires half shade and plenty of water. 50c.

M. coerulea grandiflora. Collected in Costa Rica. Leaves 2 or 3 ft. tall. Large flower, lavender and white. Half shade, abundant moisture. Very rare. Maricas are hardy only in the far south. This species is very tender. \$5.00.

Trigridia pavonia hybrids. Large, vividly colored flowers on 18" stems. They are produced freely for three months or more. We plant in sandy soil, half shade and they must be watered often after rains cease. Prices, Rose color, large flowers, 20c ea., \$1.50 per dozen. Yellow 10c ea., \$1.00 per doz. Assorted colors of fine hybrids 20c ea., \$1.50 per doz. Second size, \$1.00 per doz.

LILY FAMILY. Liliaceae

In popular language, we have Crinum Lilies, Calla Lilies, Belladonna Lilies, Snake Lilies, etc. In fact any bulb is a lily. But this is incorrect. None of them even belong in this family. They are about as closely related to true Lilies as horses are to humming birds. The Lily Family includes the true Lilies and their close relatives.

Lilium. This genus include all the true Lilies. In growth habits, there are two types. Bulb rooting and stem rooting lilies. The latter make roots from the stems above the bulbs. These may be planted in late winter, to very early in the spring. Bulb root-

ing Lilies should only be planted in the fall. Please order before March 1.

Culture. Plant 4" to 6" deep. A good rule is, three times the bulbs diameter. The best soil is sandy loam to which is added nearly 50% peat and leaf mould as Lilies need acid soils. It must be well drained. If soil is heavy, dig to depth of 8" to 12" and add sand and leaf mould when filling in with a handful of pure sand directly under bulb.

Lilium regale. Very large, fragrant white flowers with cream throat and pink or orchid tints on reverse. The hardiest and best garden Lily, increasing in size year after

year. Bulbs 4"-5", 25c. 5 for \$1.00. Small bulbs, 15c. 8 for \$1.00.

Gloriosa. Climbing Lily. The flowers resemble true lilies but surpass most of them in their gorgeous beauty and high coloring. They propagate by tubers instead of bulbs.

The stem is branching and heavy and must be supported.

Sandy, well drained soil, rich in humus, acid in reaction, is also a requirement. Given these two necessities and plenty of water they succeed easily. They do well in full sun or with a little shade. We prefer the former. It is better to plant before March 1 in the south, although good results usually follow even April planting. They have been grown successfully in the north as they may be lifted in the fall. But as they require a long season it is advisable to start in pans of sandy loam and spagnum, and shifted when warm. They have survived the winter when planted deep in New Jersey.

Gloriosa rothschildiana. It deserves the name, Glory Lily. Very vivid colors, red with yellow markings, turning later to deep red and then deep rose. 4 to 6 ft. tall. Blooming size tubers, 3" to 5" long, 50c. 6 for \$2.50. Large, extra large and jumbo tubers make much larger plants and more flowers. Price 75c, \$1.00 to \$1.50.

G. virescens. The finest of all. The flowers resemble G. rothschildiana with a shade in their favor. The plant has a stiffer and more erect stem and a sturdier growth with more branches and thus more flowers. Price \$2.00.

Galtonia candicans. Summer Hyacinth. Belongs in the group with Hyacinths and Scillas. 4 ft. scape with many white, bell shaped flowers. For landscape use in backgrounds and for cutting. Plant early, 4" deep in any good soil. Hardy in north if well sprettered better to die and store bulbe.



**GLORIOSA** 

protected, better to dig and store bulbs. 10c ea., 2 for 15c. 75c doz. Jumbo bulbs, 15c.

Oxalis Family. Oxalidaceae

No bulbs have increased more rapidly in public favor in recent years. This probably results from magazine and radio publicity, and their more frequent appearance in gardens or as house plants. Plants and flowers are variable in form and color and are most attractive and dainty. Culture. Plant in full sun exposure in any good soil. All make lovely pot plants and should be grown freely in the garden. The flowers open only in the sunlight.

See the Fall Catalog for the winter growing types. The following are summer

growers. In the north they may be potted now.

Oxalis Deppei. Four large leaflets. Deep rose pink flowers on a tall stem. A fine species. 4 for 15c. 35c doz. Extra large, 5c ea. 50c doz.

O. lasiandra. The prettiest summer Oxalis. Tall plant with 7-10 leaflets. Rosy

carmine flowers. 5c ea. 6 for 25c. Jumbo bulbs, 10c. 75c doz.

O. rubra. Flowers bright rose. Evergreen and everblooming. Increases by tubers and can be moved at any time, preferably in warm weather. Plant at once. Tubers, 35c ea.

O. sp. unknown. A small plant with freely produced white flowers. 6 S. bulbs, 15c. 25c doz. Large bulbs, 50c doz.

### ARUM FAMILY. ARACEAE

This family includes so-called "Calla Lilies," or Zantedeschia, etc.

Culture. Large white Callas should be started in the fall but Baby Calla can be moved now as bulbs are never dried off like the large types. Colored Callas, Pink, Yellow, Spotted Leaf, etc., may be potted as soon as they show signs of sprouting, sometimes as early as December 15 to January 1. See potting Directions. They may be planted outside in the south from February to April 1, and in the north as soon as danger of heavy frosts passes.

Plant 2" deep, part shade, acid soil. Use rich sandy loam or heavier soil but liberal quantity of peat and leaf mould is necessary in either. Water potted bulbs very little until growing well then give them plenty. In the house they need some sun.

Zantedeschia aethiopica, var. Baby Calla. Smallest and whitest calla. Many flowers

are less than 1" across, just right for a corsage. 20c. Three for 50c.

Z. albo-maculata. Spotted Leaf Calla. White flower. The spear shaped spotted leaves are most decorative even without flowers. S. 10c, \$1.00 doz. Blooming size, 20c, \$2 00 doz.

Z. elliotiana. Yellow Calla. The most desirable colored Calla. Blooming size, 15c, 7 for \$1.00 or \$1.50 per doz. 100 bulbs for \$8.50. Extra large bulbs,  $2'' - 2\frac{1}{2}$ ", 25c. Jumbo bulbs, over  $2\frac{1}{2}$ " diam. 35c.

Z. rehmanni. Pink Calla. The flowers vary from light to dark rose pink. Small bulbs not blooming sizes for 15c to 25c ea. Blooming sizes 35c, 50c and 75c ea. The larger sizes are more sure to flower.

Z. melanoleuca. New and rare. The largest of colored Callas. Foliage spotted and very decorative. The large, wide open, yellow flowers have a black-purple throat. \$1.00

and \$1.50 ea.

Amorphophallus revieri. Sacred Lily of India. The plants lend a rich tropical effect to borders in the south where they are hardy and even in the north as the bulbs can be dug and stored over winter. 3 ft. or more tall. The huge flowers, 2 ft. long or more are Calla shaped, rich chocolate dotted red. The Arum fragrance so much liked by flies is not too bad and soon disappears. Plant 4" deep in shade. Smaller bulbs for 50c and \$1.00. Large bulbs \$2.00 and \$2.50. The large should bloom, especially the \$2.50 size.

Sauromatum venosum. Lizard Lily. Attractive tropical foliage with spotted petioles. The rather gorgeous flowers are most unusual, having a long narrow spathe, vellow with purple-black spots. The spotted petioles and peduncles distinguish this species from S. guttatum for which this is often sold. Arum "fragrance." The dry bulbs flower out of the ground early, hence this should be ordered in Feb. Culture like Amorphophallus. Hardy. S. 25c. L. (probably will flower) \$1.00. Largest, sure bloomers, \$1.50.

#### ORCHID FAMILY. ORCHIDACEAE

Bletilla hyacintha. Attractive plaited leaves. Orchid-shaped flowers, 1" wide in a 15" raceme. Give half shade. Any soil but preferably sandy loam to which is added 50% leaf mould and if possible, peat, to render soil acid. Water well thru summer.

Hardy in north. 50c ea.

Epidendrum o'brienianum. Rankest growers among Orchids. Require supports, which in nature is furnished by grasses. They do not survive heavy frost. Require plenty of water in summer. 25% shade to full sun in a warm situation. Best soil is quite sandy and at least one half peat for the roots tho leaf mould will do. The scarlet red flowers are in a dense raceme. Large cuttings with aerial roots, \$1.00. Smaller cuttings, 75c.

#### PINEAPPLE FAMILY. BROMELIACEAE

Among Bromeliads, the Billbergias are most interesting, having a rich tropical beauty in flower and foliage. They are very tender but easily grown in pots in the north and make ideal house plants. Being epiphytes, they prefer to be rooted in leaf or wood mould, peat or sphagnum but do very well in a loose sandy soil with an equal or larger volume of leaf mould or peat added. Here they require half shade (or more) but in the house a sunny window is usually right. Give plenty water keeping leaf cups filled in summer, not too much in winter. The plants offered are single young offsets, as large old plants do not flower or multiply and soon die.

Billbergia amoena. Dwarf, but one of showiest. Flowers thru spring to fall on established plants. Bronze and green foliage, green flowers tipped dark blue and large

floral bracts of brilliant orange. \$1.50.

B. calophylla. Attractive large green leaves, with transverse bars of grey on outside. Blood red flower bracts and dark blue flowers. Freeblooming thru warm weather. \$1.50 and \$2.00.

B. distachia hybrid. Foliage reddish green with cream spots. Long spikes with

rose pink bracts and blue margins green flowers. Blooms in early spring and a few in late summer. 75c and \$1.00.

B. nutans. The most common because easiest grown, and the most satisfactory in southern gardens. The raceme is long, drooping, exquisite. Grown on the trunk of palm trees they are a charming sight in full bloom in January and February very easy in pots or garden. 50c. Plant with flower bud, specially packed, \$1.00. Order budded plant at once.

B. rubro-cyanea. The foliage has very rich variable markings of green, red and white. Flowers green, edged dark blue with crimson bracts. Always interesting and

lovely. \$1.00 to \$1.50.

B. speciosa. Light green leaves with greyish bloom on back. Gorgeous inflorescence of green flowers with pink bracts. \$1.75.

B. thrysiflora. Abundant and gracefully recurved bright green leaves. Startling

inflorescence of scarlet bracts and purplish flowers. \$2.00.

**B. zebrina.** The Pineapple Lily of Hawaii. Beautifully barred and spotted leaves. When about 2 ft. tall it sends out an enormous pendant flower spike of cerise pink bracts and chartreuse green flowers. \$1.50 to \$2.50.

#### Miscellaneous

Anemones and Ranunculus. (Ranunculaceae). The culture is the same. Plant about 2" deep and 4" to 5" apart. Soil should contain leaf mould or well-decayed fine manure. In Southern California in the interior they can be planted until about March 1. But earlier is better as they do not like the hot weather. On the coast they may be planted later. Around San Francisco Bay or in cool beach regions they may be planted at any time of year. It is advisable to sprout the bulbs in moist, not soggy sand, in a cool place, and plant as soon as sprouts show. For late planting it is better to use No. 2 bulbs, as they bloom earlier.

Anemones. Assorted colors. The mixture contains all colors except yellow. These are the best bulbs, and the best strain of flowers we have seen. The standard size for outside bedding is size No. 3. Price 15c doz. 100 for \$1.00. No. 2 bulbs, for pots and

r earlier flowers outside, 30c doz. \$2.00 per 100.

Single Red, 20c doz. 100 for \$1.25.

Ranunculus. Assorted colors. There are no blue Ranunculas. This double flowers strain produces double flowers in a great variety of shapes. There will be few single wers if you give them rich soil and correct culture. Size No. 3, 15c doz. \$1.00 per 0. Size No. 4 will do well under favorable conditions and culture producing excellent flowers. Price 60c per 100. Large bulbs, No. 2, for pots or for more and earlier flowers in garden, 30c per doz. \$2.00 per 100. (The No. 2 size of Anemones and Ranunculus are also a little easier to grow.)

Commelina coelestris. (Commelinaceae). Day Flower. The most intense, bluest blue flowers. Flowers open about noon in greatest profusion. Plants are almost perpetual bloomers. Plant tubers 2" or 3" deep. Full sun. Easy culture. Three for 20c.

50c doz. Extra large tubers, 15c ea. \$1.00 doz.

New Violet, Royal Robe. Large lustrous flowers of deepest violet-blue on long stems. Intensely fragrant wide open flowers. You can grow these outside like any other violets or in pots in the house. They will be best suited in a temperature of about 50° F. They do not like heat, and do not bloom if much warmer. They grow well in any good garden soil, like plenty of moisture but should not be overwatered. Price 40c ea. or 3 for \$1.00.

Tecolote Bill's Fancy Corn. Grows and looks like any corn but when you husk it you find it most gaudily colored. There are white ears, black, blue or red ones (sometimes) but most of them will consist of several colors including the above as well as pink and many grains are striped or multi-colored. We cannot promise exact colors as like Tecolote Bill you never know what he is going to do. But they will be interesting and attractive decorations for around Thanksgiving to Christmas. 25c per pkt.